

AMENDMENTS TO THE SPECIFICATION

A. In the specification please replace the Abstract of the Disclosure on page 63 of the specification with the following paragraph:

A flexible interface and a method for employing the same are provided for interconnecting a client program with a workflow server running a workflow management system having workflow-type functionality. ~~The workflow functionality includes a set of predefined process templates defining a set of tasks and being capable of monitoring workflow instances, assigning tasks to users, and allowing users to initiate instances of a process from one of the set of predefined process templates.~~ The interface includes ~~comprises~~ a set of predefined protocol user interface pages including ~~comprising~~ at least one control page with said predefined protocol having at least one client-server side script embedded therein. At least one first workflow platform-dependent object is provided for accessing the workflow functionality. At least one second workflow platform-independent object is provided for providing data to the ~~at least one~~ first workflow platform-dependent object. At least one server program is provided that is callable by the ~~at least one~~ control page to access the workflow functionality by invoking and adapted to invoke at least one of the first workflow platform-dependent object and the ~~at least one~~ second workflow platform-independent object. ~~Thus, when the functionality of the workflow management system is to be accessed via the set of predefined protocol user interface pages, the at least one control page calls the at least one server program which, in turn, invokes at least one of the first and second objects to promote data translation and exchange between the client program and the workflow management system.~~

B. In the specification please replace the paragraph beginning at page 14, line 31 and ending at page 15, line 3 (the paragraph begins with "Turning to Figures 4-14..." and ends with "... (not shown herein).") with the following paragraph:

Turning to Figures 4-16 ~~Figures 4-14~~ in connection with the following description of the control pages 42, it should be noted that the interface 40 includes efficiency-enhancing features such as a quick navigation frame 50 at an upper portion of each of the control pages 42 having links which perform such functions as logging a user into and out of the WFMS 10 (see Figure 4), immediately jumping to a user's worklist (see Figure 5), and providing context-specific access to online help instructions (not shown herein).

C. In the specification please replace the paragraph beginning at page 15, line 4 and ending at page 15, line 15 (the paragraph begins with “The interface 40...” and ends with “...selected control pages 42.”) with the following paragraph:

The interface 40 preferably includes at least a first frame 52 and a second frame 54, as used in web-related parlance to mean a portion of the web client 34 window divided whereby the contents of one frame can be scrolled without affecting the contents of another frame. The first frame 52 is preferably always in view as it identifies the web client 34 and includes the quick navigation frame 50. The second frame 54 is optionally included in the interface 40 and its specific appearance is described below with reference to the specific descriptions of the control pages 42. With regard to Figures 4-16 ~~Figures 4-14~~, it can be seen that the first frame 52 is visible in all appearances of the web client 34, however, the second frame 54 is available in selected control pages 42.

D. In the specification please replace the paragraph beginning at page 15, line 27 and ending at page 15, line 28 (the paragraph begins with “The authentication...” and ends with “...servlet 46-17.”) with the following paragraph:

The authentication information entered in the text boxes 55 and 56 ~~text boxes 54 and 56~~ are then submitted to a Log On servlet 46-17.

E. In the specification please replace the paragraph beginning at page 16, line 21 and ending at page 16, line 28 (the paragraph begins with “The worklist control page...” and ends with “...the WFMS 10.”) with the following paragraph:

The worklist control page 42-5 is a main focus page of the interface 40. A title 59 ~~58~~ identifies the user ID that was successfully logged in on control page 42-4. An alert area 60 can be provided beneath the title 59 ~~58~~ for providing informational messages to a user about accessing particular areas of the interface 40. A second navigation bar 62 is provided beneath the alert area 60, which includes a series of links for efficiently accessing other important areas of the WFMS 10.

F. In the specification please replace the paragraph beginning at page 16, line 29 and ending at page 17, line 6 (the paragraph begins with “Examples of links...” and ends with “...with respect to Figures 9-13).”) with the following paragraph:

Examples of links provided in the second navigation bar 62 include a Notifications link 64 which can jump to a notifications ~~control page 42-16~~ ~~control page 42-6~~ providing the user with informational messages. The Notifications link 64 is deactivated, i.e., displayed as unclickable plain text (or not displayed at all), if there are no notifications for the logged-on user. An Instances link 66 can jump the user to an instances control page 42-6 describing running instances of processes (such as that shown in Figure 6). A Templates link 68 can jump the user to a templates control page 42-8 describing the process templates accessible to the user (such as that shown in Figure 8). A Filter Worklist link 70 can jump the user to a worklist-filter control page 42-9 allowing sub-querying and filtering of the work available to the user (such as that shown and described with respect to Figures 9-13).

G. In the specification please replace the paragraph beginning at page 19, line 10 and ending at page 19, line 17 (the paragraph begins with “Another example can be...” and ends with “...the worklist control page 42-5.”) with the following paragraph:

Another example can be shown with reference to the "Name" column heading 84, which shows the name of the activity for the work item. The interface can display selected names in this column as hypertext links that, when clicked, jump a user to a web page containing a form that prompts the user for information to complete the clicked-upon activity (e.g., see activity user interface page ~~44~~ ~~44-15~~ in Figure 15). Once the activity is completed, the user is returned to the worklist control page 42-5.

H. In the specification please replace the paragraph beginning at page 21, line 19 and ending at page 21, line 26 (the paragraph begins with “Typically, the interface 40...” and ends with “...that process template.”) with the following paragraph:

Typically, the interface 40, upon a single-click initiation of a new process instance, jumps the user to an activity user interface page 44 to gather required information for the new process instance (see the activity user interface page ~~44~~ ~~44-15~~ described below with respect to Figure 15). For process instances, which do not require user-entered information via an

activity user interface page 44, simply clicking the hypertext link in the "Name" initiates a new process instance of that process template.

I. In the specification please replace the paragraph beginning at page 24, line 5 and ending at page 24, line 15 (the paragraph begins with "Unlike the worklist..." and ends with "...the user's worklist.") with the following paragraph:

Unlike the worklist view control page 42-5, however, the entries in the table 138 in the second frame 54 are used to add criteria to the proposed filter expression 122. Each time the user clicks on a link in the table 138, the proposed filter expression 122 is appended with a criterion matching the clicked-upon data. For example, if the user clicks on a row data entry 141-140 in the "Name" column, the filter expression 122 will be appended with NAME = data, where data equals the hypertext link on which the user clicked. The change is reflected immediately in the proposed filter expression 122, although the user must click on the "Submit Proposed Filter" button 136 in the top frame 52 to see the update to the user's worklist.

J. In the specification please replace the paragraph beginning at page 28, line 3 and ending at page 24, line 19 (the paragraph begins with "Figure 15 is an example..." and ends with "...pages 44 thereto.") with the following paragraph:

Figure 15 is an example of an activity user interface page 44 wherein a user enters data via the user interface page 44 for process templates or work items which require user-entered data to instantiate a process or to complete a work item. As can be seen by the example of Figure 15, various HTML <FORM> controls 188 can be added to the page (typically by the client's network administrator designing the user interface pages 44 to collect the appropriate data from the users). These <FORM> tags can include all allowable HTML user interface tags. For example: <TEXT>, <INPUT>, <TEXTAREA>, <CHECKBOX>, <BUTTON>, etc. Since these user interface pages 44 will take any form depending upon the network administrator's preferences and the requirements of the particular WFMS 10, they are not discussed in detail here. Particular attention can be paid to the guidelines set forth at the end of this description of how to embed HTML and scripting commands to call the desired servlets 46 to access the functionality of the WFMS 10 and provide the user-entered data in the user interface pages 44 thereto.

K. In the specification please replace the paragraph beginning at page 29, line 27 and ending at page 30, line 2 (the paragraph begins with “One important first category...” and ends with “...instead of worklist behavior.”) with the following paragraph:

One important first category custom class pursuant to this invention is the ListData class that encapsulates workflow state information of the WFMS 10 in list form. Although quite complex, it will be illustrated below that the basic data stored in the WFMS 10 is returned by the ListData class including: worklists (see control page 42-5), process instance lists (see control page 42-6), process template lists (see control page 42-8), process instance monitoring lists (see control page 42-7), work item state lists (see control page 35 42-14), notification lists (see control page 42-16) and filter tables (see control pages 42-9, -10, -10A, -11, -12, -13), i.e., worklist data but formatted for filtering instead of worklist behavior.

L. In the specification please replace the paragraph beginning at page 33, line 1 and ending at page 33, line 5 (the paragraph begins with “The filter parameter...” and ends with “...provided to the WFMS 10.”) with the following paragraph:

The filter parameter can be passed as a null value. If provided, it should be a valid filter expression for a worklist as specified in the WFMS-specific application program interface. It should be noted that the filter worklist control pages 42-9 through 42-13 ~~42-12~~ supply such a worklist filter expression, which is provided to the WFMS 10.

M. In the specification please replace the paragraph beginning at page 35, line 11 and ending at page 35, line 15 (the paragraph begins with “Thus, the Activity servlet...” and ends with “...Workitem-identifying string <218>.”) with the following paragraph:

Thus, the Activity servlet 46-18 invokes WorkItemType.checkOut() <222> to reserve the desired work item identified by the workitem-identifying string <218> for use by the user. The Activity servlet 46-18 then creates a new WorkitemBean <224> as identified by the Workitem-identifying string <218>.

N. In the specification please replace the paragraph beginning at page 37, line 11 and ending at page 37, line 16 (the paragraph begins with “Figure 20 is...” and ends with “...hypertext markup language.”) with the following paragraph:

Figure 20 is a flowchart detailing the structure, function and operation of a New Instance servlet 46-20 typically called by the either the template view control page 42-8 described with respect to Figure 8 or a process instance activity creation-user interface page 44 specially designed and configured for supplying any needed data for instantiating a new process instance with hypertext markup language.

O. In the specification please replace the paragraph beginning at page 38, line 30 and ending at page 39, line 3 (the paragraph begins with "Otherwise, the identified..." and ends with "...the targeted page <262>.") with the following paragraph:

Otherwise, the identified process template needs data to be instantiated, so the New Instance servlet 46-20 creates a new ObjectId object <254> and associates the ProcessTemplateType's identifying string with the ObjectId <256> so the instantiated process has its identifier. The ObjectId object is made accessible to a forwarded URL <258>. The URL of the Process Instance Activity Creation-UI Page 44 is computed to determine the target page where the needed data will be entered by a user <260> and navigation jumps to the targeted page <262>.

P. In the specification please replace the paragraph beginning at page 39, line 4 and ending at page 39, line 7 (the paragraph begins with "The user then enters..." and ends with "...HTML <FORM>.") with the following paragraph:

The user then enters the data into the targeted Process Instance Activity Creation-UI Page 44 and terminates the data entry in a conventional fashion (such as by pressing a "Submit" button on an administrator designed HTML <FORM>).

Q. In the specification please replace the paragraph beginning at page 39, line 8 and ending at page 39, line 14 (the paragraph begins with "The data entered..." and ends with "...UI Page 44.") with the following paragraph:

The data entered by the user in the targeted Process Instance Activity Creation-UI Page 44 is returned to the New Instance Servlet with new parameters <264> containing the submission-specific inputs from the Process Instance Activity Creation-UI Page 44. These parameters <264> are added <266> to the previously submitted parameters <242> with the

page-invoking indicator now signaling invocation by a Process Instance Activity Creation-UI
Page 44.

R. In the specification please replace the paragraph beginning at page 45, line 31 and ending at page 46, line 3 (the paragraph begins with “The format of activity...” and ends with “...output data container.”) with the following paragraph:

The format of activity user interface files 44 will now be described which are similar in form to a process-instance activity creation-user interface file 44. The administrator uses embedded java code to access input container data, and form input fields are used to set output container data.